CALIFORNIA ~~STATE~~ BOARD OF HEALTH.

MONTHLY BULLETIN.

Entered as second-class matter August 15, 1905, at the post office at Sacramento, California, under the Act of Congress of July 16, 1894.

Vol. 2. SACRAMENTO, AUGUST, 1906. No. 3.

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STATISTICS OF MARRIAGES: 1905-1906.

Summary.—Altogether 17,932 marriages were reported to the California State Bureau of Vital Statistics in 1905-1906, the first year covered by the new law requiring marriages to be registered.

San Francisco reported 4,230 marriages, or 23.6 per cent of the State total, despite the loss of records in April, 1906.

There were also over 2,000 marriages for the year in Los Angeles and Alameda counties; between 600 and 1,000 in Santa Clara, Sacramento, and Marin; and between 400 and 500 in Fresno, San Diego, San Joaquin, San Bernardino, and Orange.

For an estimated State population of 1,784,521 in 1905 the 17,932 marriages in 1905-1906 give a rate of 10.0 per 1,000 population, though complete returns from Los Angeles county for the year would make the State rate 11.1 instead.

The marriage-rate is higher for the seven counties of Southern California than for the fifty north of Tehachapi. The rate is also higher for the metropolitan area, comprising San Francisco and the other bay counties, than for the rural counties of Northern and Central California.

Among the individual counties, Marin shows the highest marriage-rate, 36.4 per 1,000 population, followed by Orange 18.5, San Mateo 17.9, Sacramento 17.0, and Los Angeles 15.6 (corrected rate). The marriage-rates are also above the State average, 10.0, for the following counties: San Bernardino, Santa Clara, Alameda, Riverside, San Diego, San Joaquin, Fresno, Tulare, Santa Barbara, Stanislaus, and San Luis Obispo.

The statistics indicate that there is a decided tendency for persons living in rural counties to be married at the largest city easily accessible. This seems the readiest explanation of the relatively high marriage-rates not only for the metropolitan area in Northern and Southern California and for Los Angeles county in Southern California, but also for the counties containing such cities as Sacramento, San José, Stockton, Fresno, Visalia, Modesto, and San Luis Obispo.

There is also a counter movement by which residents of very large cities, like San Francisco or Los Angeles, prefer to be married in suburban counties. Thus it happens that the marriage-rates are much higher for Marin, San Mateo, and Alameda counties than for the metropolis itself, and that in Southern California the rate is highest for Orange rather than for Los Angeles county. This movement is particularly marked on San Francisco Bay, where San Rafael, in Marin county, is a veritable Gretna Green, especially, as shown later, for divorcees.

In 13,182 of the 17,932 marriages in 1905–1906, or 73.5 per cent of all cases, the marriage was the first for both parties. The per cent of first marriages is highest, 76.8, for the coast counties of Northern California, followed by 76.2 for the interior counties of Central California and 76.0 for San Francisco.

While 1,958 single men were married to widowed or divorced women, only 1,450 single women were married to widowed or divorced men. In fact, only nine of the fifty-seven counties show exceptions to the rule that there are more unions of bachelors with widows than of maids with widowers.

In 1,342 instances, or 7.5 per cent of all, the marriage was the second or over of both parties. The per cent of marriages where both parties had been married before is particularly high for Southern California, especially outside Los Angeles, and for the bay counties other than San Francisco. Though among the eight minor geographic divisions, San Francisco has the lowest per cent of such marriages, yet the per cent is somewhat higher for the metropolitan area than for the rural counties of Northern and Central California.

Altogether 15,140 or 84.4 per cent of the grooms were single, 1,655 widowed, and 1,137 divorced; while of the brides 14,632 or 81.6 per cent were single, 1,891 widowed, and 1,409 divorced. The widows outnumber the widowers by 236 or 14.3 per cent, and among the divorced the women exceed the men by 272 or 23.9 per cent.

The per cent of widowers is particularly high only in Southern California, especially outside Los Angeles, but the per cent of widows is relatively high, not only in Southern California, but also in both the coast and interior counties of Northern California.

The per cent divorced, both among grooms and brides, is highest for the bay counties other than San Francisco, and next for Southern California, especially outside Los Angeles, being highest south of Tehachapi in Orange county.

Though the per cent of divorced brides is 7.9 for all California and only 7.4 for San Francisco, it is 8.9 for Alameda, 9.0 for Contra Costa, 14.1 for San Mateo, and 15.5 for Marin. It appears, therefore, that the tendency for residents of the metropolis to be married in suburban counties is particularly strong among divorcees.

County Totals.—Under the law of 1905 requiring County Recorders as local registrars to transmit to the State Registrar the original marriage certificates filed with them each month, 17,932 marriages were registered in the California State Bureau of Vital Statistics for 1905–1906. The total for the last half of 1905 was 8,338, against 9,594 for the first half of 1906.

Table 1, below, shows the counties for which at least 100 marriages were reported to the State Bureau of Vital Statistics in 1905–1906:

TABLE 1.—*Rank of Counties with at Least 100 Marriages: 1905–1906.*

Rank.	County.	Marriages: 1905–1906.
	THE STATE	17,932
1.	San Francisco	4,230
2.	Los Angeles	*2,241
3.	Alameda	2,221
4.	Santa Clara	921
5.	Sacramento	826
6.	Marin	619
7.	Fresno	491
8.	San Diego	480
9.	San Joaquin	456
10.	San Bernardino	453
11.	Orange	421
12.	Riverside	266
13.	Sonoma	237
14.	San Mateo	235
15.	Santa Barbara	226
16.	Santa Cruz	225
17.	Tulare	205
18.	Mendocino	181
19.	San Luis Obispo	179
20.	Humboldt	170
21.	Napa	159
22.	Solano	158
23.	Contra Costa	155
24.	Monterey	153
25.	Kern	140
26.	Ventura	137
27.	Shasta	132
28.	Nevada	118
29.	Kings	112
30.	Siskiyou	111
31.	Stanislaus	104
32.	Butte	103
	Remaining 25 counties	1,067

*Returns incomplete.

Despite the destruction of certificates for more than one half of April, 1906, and incomplete registration in the confusion following the great fire, San Francisco with 4,230 marriages properly registered contributes 23.6 per cent of the State total. The returns for Los Angeles cover little over half a year, the first certificates received having been for December, 1905. Complete returns for the whole twelve months would have made the total for Los Angeles county nearer that for San Francisco. In Alameda county, as well as San Francisco and Los Angeles, over 2,000 marriages were registered in 1905–1906.

With regard to the number of marriages registered, the counties fall into several groups. First, there is a group of 3 counties, each with over 2,000 marriages in the year; next comes another group of 3 counties, each with between 600 and 1,000 marriages in the year; then a group of 5, each with from 400 to 500 marriages; then a group of 6, with from 200 to 300 marriages; and then a group of 15 with from 100 to 200 marriages.

In addition to the 32 counties ranked in Table 1, there were 9 with from 50 to 100 marriages in the year, viz.: Amador, Calaveras, El Dorado, Merced, San Benito, Tehama, Tuolumne, Yolo, and Yuba; 10 with from 25 to 50 marriages, viz.: Colusa, Glenn, Inyo, Lake, Lassen, Madera, Modoc, Placer, Plumas, and Sutter; and 6 with less than 25 marriages each, viz.: Alpine, Del Norte, Mariposa, Mono, Sierra, and Trinity.

Marriage-rates.—For the purpose of calculating marriage-rates, the population of California in 1905 has been estimated conservatively according to the Census Bureau method by adding to the population in 1900 five tenths of the increase between 1890 and 1900, except that for the few counties showing decreases between the last two Federal censuses the population in 1900 has been taken for 1905, and for the three principal cities arbitrary estimates have been made because of their exceptionally rapid growth. The estimate for San Francisco in 1905 is 450,000, for Los Angeles, 180,000, and for Oakland, 90,000. As a bulk of the marriage returns for 1905–1906 were not affected by the public calamity in April, 1906, no estimates have been changed on account of temporary readjustments of population caused by the San Francisco fire. For convenience in tabulation, the fifty-seven counties of California have been grouped in three main and eight minor geographic divisions, which appear in Table 2, the counties in each group being arranged alphabetically for the sake of ready reference. Marriage-rates are also shown for the metropolitan area, comprising San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo) in contrast with the rural counties of Northern and Central California.

TABLE 2.—*Estimated Population (1905), Marriages, and Marriage-rate per 1,000 Population, for Counties arranged Geographically: 1905–1906.*

County.	Estimated Population: 1905.	Marriages: 1905–1906.	Marriage-rate per 1,000 Population.
THE STATE	1,784,521	17,932	*10.0
Northern California	269,510	1,693	6.3
Coast counties	121,785	806	6.6
Del Norte	2,408	15	6.2
Humboldt	28,922	170	5.9
Lake	6,017	32	5.3
Mendocino	21,892	181	8.3
Napa	16,471	159	9.7
Sonoma	41,360	237	5.7
Trinity	4,715	12	2.5
Interior counties	147,725	887	6.0
Butte	17,117	103	6.0
Colusa	7,364	38	5.2
Glenn	5,150	35	6.8
Lassen	4,647	30	6.5
Modoc	5,121	44	8.6
Nevada	17,999	118	6.6
Placer	16,129	41	2.5
Plumas	4,657	30	6.4
Shasta	19,911	132	6.6
Sierra	4,017	16	4.0
Siskiyou	19,362	111	5.7
Sutter	6,095	35	5.7
Tehama	11,536	81	7.0
Yuba	8,620	73	8.5
Central California	1,105,090	12,015	10.9
San Francisco	450,000	4,230	9.4
Other bay counties	216,127	3,230	14.9
Alameda	165,700	2,221	13.4
Contra Costa	20,312	155	7.6
Marin	17,017	619	36.4
San Mateo	13,098	235	17.9
Coast counties	132,371	1,544	11.7
Monterey	19,752	153	7.7
San Benito	6,744	66	9.8
San Luis Obispo	16,920	179	10.6
Santa Clara	66,322	921	13.9
Santa Cruz	22,633	225	9.9

TABLE 2.—*Estimated Population (1905), Marriages, and Marriage-rate per 1,000 Population for Counties arranged Geographically: 1905–1906—Continued.*

County.	Estimated Population: 1905.	Marriages: 1905–1906.	Marriage-rate per 1,000 Population.
Central California—Continued.			
Interior counties	306,592	3,011	9.8
Alpine	509	1	2.0
Amador	11,514	56	4.9
Calaveras	12,359	51	4.1
El Dorado	8,986	56	6.2
Fresno	43,079	491	11.4
Inyo	4,794	30	6.3
Kern	19,816	140	7.1
Kings	12,044	112	9.3
Madera	7,247	40	5.5
Mariposa	5,187	11	2.1
Merced	9,780	75	7.7
Mono	2,250	5	2.2
Sacramento	48,703	826	17.0
San Joaquin	38,864	456	11.7
Solano	25,742	158	6.1
Stanislaus	9,550	104	10.9
Tulare	18,375	205	11.2
Tuolumne	13,708	99	7.2
Yolo	14,085	95	6.7
Southern California	409,921	4,224	*10.3
Los Angeles	259,000	2,241	*8.7
Other counties	150,921	1,983	13.1
Orange	22,750	421	18.5
Riverside	20,140	266	13.2
San Bernardino	31,441	453	14.4
San Diego	39,551	480	12.1
Santa Barbara	20,524	226	11.0
Ventura	16,515	137	8.3
Northern and Central California	1,374,600	13,708	10.0
Coast counties	920,283	9,810	10.7
Interior counties	454,317	3,898	8.6
Metropolitan area	666,127	7,460	11.2
Rural counties	708,473	6,248	8.8

*The 2,241 marriages for Los Angeles County include only 191 for 1905, against 2,050 for 1906, so that the registration is short by 1,800 or more. Corrected for this omission, the rate would be 11.1 for the State, 14.7 for Southern California, and 15.6 for Los Angeles.

It appears from Table 2 that for an estimated State population of 1,784,521 in 1905, the 17,932 marriages registered in 1905–1906 give a marriage-rate of 10.0 per 1,000 population, though complete returns for Los Angeles county would make the State rate 11.1 instead. The marriage-rate is higher for Southern California than for Northern and Central California together. In Northern as well as Central California the rate is higher for the coast counties than for the interior counties. The rate is also considerably higher for the metropolitan area, comprising San Francisco and the other bay counties, than for the rural counties north of Tehachapi.

Among the individual counties, Marin shows the highest marriage-rate, 36.4 per 1,000 population, followed by Orange 18.5, San Mateo 17.9, and Sacramento 17.0. The corrected rate for Los Angeles county, 15.6, would place it next in rank, followed by San Bernardino 14.4, Santa Clara 13.9, Alameda 13.4, Riverside, 13.2, San Diego 12.1, San Joaquin 11.7, Fresno, 11.4, Tulare 11.2, Santa Barbara 11.0, Stanislaus, 10.9, and San Luis Obispo 10.6, these being the counties with marriage-rates above the State average.

The fact that the marriage-rate is higher for the metropolitan area than for the rural counties of Northern and Central California and that the corrected rate for Los Angeles is above that for the rest of Southern California, indicates that marriages usually take place at urban centers. Moreover, the counties named as having marriage-rates above the State average will be readily recognized as counties having large cities. As a rule, too, in each geographic division the counties with rates above the average for the group are counties with important cities or towns. It seems, therefore, that there is a decided tendency for those about to marry to slip away from their homes in rural counties to be married at an important city in some other county.

At the same time there is a counter movement by which couples residing in great cities like San Francisco and Los Angeles go to a suburban county when they wish to be married. This counter movement is shown by the fact that at San Francisco bay the marriage-rates are much higher for Marin, San Mateo, and Alameda counties than for the metropolis itself, and in Southern California the marriage-rate for Orange county is considerably higher even than the corrected rate for Los Angeles.

Number in Order.—Table 3, below, gives the number in order of marriages, with per cents, for the three main and eight minor geographic divisions, including certain other groups of counties.

TABLE 3.—*Marriages classified by Number in Order, with Per Cent Distribution, for Geographic Divisions: 1905–1906.*

Geographic Division.	Total Marriages.	Number of Marriage.				Per Cent of Marriages.			
		1st of Both Parties.	1st of Groom Only.	1st of Bride Only.	2d or Over of Both.	1st of Both Parties.	1st of Groom Only.	1st of Bride Only.	2d or Over of Both.
THE STATE	17,932	13,182	1,958	1,450	1,342	73.5	10.9	8.1	7.5
Northern California	1,693	1,278	194	110	111	75.5	11.5	6.5	6.5
Coast counties	806	619	89	49	49	76.8	11.0	6.1	6.1
Interior counties	887	659	105	61	62	74.3	11.8	6.9	7.0
Central California	12,015	8,900	1,331	933	851	74.1	11.1	7.7	7.1
San Francisco	4,230	3,217	456	312	245	76.0	10.8	7.4	5.8
Other bay counties	3,230	2,241	415	282	292	69.4	12.9	8.7	9.0
Coast counties	1,544	1,147	145	141	111	74.3	9.4	9.1	7.2
Interior counties	3,011	2,295	315	198	203	76.2	10.5	6.6	6.7
Southern California	4,224	3,004	433	407	380	71.1	10.3	9.6	9.0
Los Angeles	2,241	1,630	216	205	190	72.7	9.6	9.2	8.5
Other counties	1,983	1,374	217	202	190	69.3	10.9	10.2	9.6
Northern and Central California	13,708	10,178	1,525	1,043	962	74.3	11.1	7.6	7.0
Coast counties	9,810	7,224	1,105	784	697	73.6	11.3	8.0	7.1
Interior counties	3,898	2,954	420	259	265	75.8	10.8	6.6	6.8
Metropolitan area	7,460	5,458	871	594	537	73.1	11.7	8.0	7.2
Rural counties	6,248	4,720	654	449	425	75.5	10.5	7.2	6.8

Of the 17,932 marriages registered in 1905–1906, 13,182 or 73.5 per cent were first marriages for both parties, neither groom nor bride having ever been married before. The per cent of marriages with both parties single is highest for the coast counties of Northern California, 76.8, the interior counties of Central California, 76.2, and for San Francisco, 76.0. It is lowest, 69.3, for Southern California outside Los Angeles, and next lowest, 69.4, for the bay counties other than San Francisco. The per cent of marriages where neither party was married before is higher for Northern and Central California than for Southern California and north of Tehachapi is higher for the rural counties than for the metropolitan area.

In 1,958 cases, or 10.9 per cent of all, the marriage was the first of the groom only, and in 1,450 cases, or 8.1 per cent, it was the first of the bride only. As a rule, the number of single men marrying widowed or divorced women is greater than the number of single women marrying widowed or divorced men. No geographical division shows a variation from this rule, and exceptions to the rule appear for only nine counties, Plumas, Siskiyou, Monterey, San Benito, San Luis Obispo, Santa Cruz, Kings, Riverside, and Santa Barbara.

In no more than 1,342 instances, or 7.5 per cent of the total number, was the marriage the second or over of both the groom and the bride, each party having been married once or more before. The per cent of marriages where both parties had been previously married is highest, 9.6, for the six counties of Southern California other than Los Angeles, followed by 9.0 for the bay counties other than San Francisco and by 8.5 for Los Angeles. The per cent of marriages where neither party was single is lowest of all, 5.8, for San Francisco, next, 6.1, for the coast counties of Northern California, and next, 6.7, for the interior counties of Central California. The per cent of such marriages is somewhat higher for the metropolitan area than for the rural counties of Northern and Central California, being 7.2 for the former, against 6.8 for the latter.

Status of Parties.—Table 4 shows for each geographic division the civil status or marital condition of both grooms and brides—whether single, widowed, or divorced—at the time of marriage.

TABLE 4.—*Grooms and Brides classified by Marital Condition, with Per Cent Distributions, for Geographic Divisions: 1905-1906.*

Geographic Division.	Totals.	Grooms.			Brides.		
		Single.	Widow'd	Divorced.	Single.	Widow'd.	Divorced.
NUMBERS.							
THE STATE	17,932	15,140	1,655	1,137	14,632	1,891	1,409
Northern California	1,693	1,472	156	65	1,388	203	102
Coast counties	806	708	71	27	668	96	42
Interior counties	887	764	85	38	720	107	60
Central California	12,015	10,231	1,001	783	9,833	1,194	988
San Francisco	4,230	3,673	311	246	3,529	388	313
Other bay counties	3,230	2,656	304	270	2,523	366	341
Coast counties	1,544	1,292	144	108	1,288	138	118
Interior counties	3,011	2,610	242	159	2,493	302	216
Southern California	4,224	3,437	498	289	3,411	494	31
Los Angeles	2,241	1,846	240	155	1,835	246	160
Other counties	1,983	1,591	258	134	1,576	248	159
Northern and Central California	13,708	11,703	1,157	848	11,221	1,397	1,090
Coast counties	9,810	8,329	830	651	8,008	988	814
Interior counties	3,898	3,374	327	197	3,213	409	276
Metropolitan area	7,460	6,329	615	516	6,052	754	654
Rural counties	6,248	5,374	542	332	5,169	643	436

TABLE 4.—*Grooms and Brides classified by Marital Condition, with Per Cent Distributions, for Geographic Divisions: 1905-1906—Continued.*

Geographic Division.	Totals.	Grooms.			Brides.		
		Single.	Widow'd	Divorced.	Single.	Widow'd	Divorced.
PER CENTS.							
THE STATE	100.0	84.4	9.2	6.4	81.6	10.5	7.9
Northern California	100.0	87.0	9.2	3.8	82.0	12.0	6.0
Coast counties	100.0	87.8	8.8	3.4	82.9	11.9	5.2
Interior counties	100.0	86.1	9.6	4.3	81.2	12.0	6.8
Central California	100.0	85.4	8.3	6.5	81.8	10.0	8.2
San Francisco	100.0	86.8	7.4	5.8	83.4	9.2	7.4
Other bay counties	100.0	82.2	9.4	8.4	78.1	11.3	10.6
Coast counties	100.0	83.7	9.3	7.0	83.4	8.9	7.7
Interior counties	100.0	86.7	8.0	5.3	82.8	10.0	7.2
Southern California	100.0	81.4	11.8	6.8	80.7	11.7	7.6
Los Angeles	100.0	82.4	10.7	6.9	81.9	11.0	7.1
Other counties	100.0	80.2	13.0	6.8	79.5	12.5	8.0
Northern and Central California	100.0	85.4	8.4	6.2	81.9	10.2	7.9
Coast counties	100.0	84.9	8.5	6.6	81.6	10.1	8.3
Interior counties	100.0	86.6	8.4	5.0	82.4	10.5	7.1
Metropolitan area	100.0	84.8	8.3	6.9	81.1	10.1	8.8
Rural counties	100.0	86.0	8.7	5.3	82.7	10.3	7.0

It appears from Table 4 that 15,140 or 84.4 per cent of the grooms were single, 1,655 or 9.2 per cent were widowed, and 1,137 or 6.4 per cent were divorced. Among the brides the single numbered 14,632 or 81.6 per cent, the widowed 1,891 or 10.5 per cent, and the divorced 1,409 or 7.9 per cent. The widows outnumber the widowers by 236 or 14.3 per cent, and the number of divorced women exceeds that of divorced men by 272 or 23.9 per cent.

The per cent of widowers is particularly high (11.8) in Southern California, being 10.7 for Los Angeles and 13.0 for the other six counties. The per cent of widows is also highest (12.5) for the six counties of Southern California other than Los Angeles, and is next highest, 12.0 and 11.9 respectively, for the interior and coast counties of Northern California.

The per cent divorced, both among grooms and brides, is highest for the bay counties other than San Francisco, and next for Southern California, especially outside Los Angeles. While the per cent of divorced grooms is only 6.4 for the State, it is 8.4 for the four counties adjoining San Francisco, 6.9 for Los Angeles and 6.8 for the other six counties of Southern California, being 8.3 for Orange county. Similarly, as compared with 7.9 for the State, the per cent of divorced brides is 10.6 for the four counties suburban to San Francisco, and 8.0 for the six counties of Southern California other than Los Angeles, being 10.0 for Orange against 7.1 for Los Angeles. Though the per cent of divorced brides is only 7.4 for San Francisco, it is 8.9 for Alameda, 9.0 for Contra Costa, 14.1 for San Mateo, and 15.5 for Marin. But as heretofore explained, residents of the metropolis often prefer to be married in the suburbs and this seems to be especially the case among divorced persons.

VITAL STATISTICS FOR AUGUST.

Summary.—For August there were reported 1,796 living births; 2,106 deaths, exclusive of stillbirths; and 1,709 marriages. For an estimated State population of 1,882,483 in 1906 the returns for August give the following annual rates: Births, 11.4; deaths, 13.4; and marriages, 10.9, per 1,000 population.

Tuberculosis, as usual, was the leading cause of death and typhoid fever was the most fatal epidemic disease.

Causes of Death.—The following table gives the number of deaths due to certain principal causes in August, as well as the proportion from each cause per 1,000 total deaths for both August and July:

Cause of Death.	Deaths: August.	Proportion per 1,000.	
		August.	July.
All Causes	2,106	1,000.0	1,000.0
Typhoid fever	72	34.2	18.8
Malarial fever	10	4.7	7.3
Smallpox	----	----	0.5
Measles	3	1.4	2.7
Scarlet fever	----	----	0.9
Whooping-cough	11	5.2	2.7
Diphtheria and croup	8	3.8	5.5
Influenza	1	0.5	0.9
Other epidemic diseases	11	5.2	8.3
Tuberculosis of lungs	279	132.5	129.8
Tuberculosis of other organs	32	15.2	24.3
Cancer	114	54.1	50.9
Other general diseases	74	35.1	28.4
Meningitis	21	10.0	24.3
Other diseases of nervous system	173	82.2	88.1
Diseases of circulatory system	283	134.4	121.1
Pneumonia and broncho-pneumonia	104	49.4	34.4
Other diseases of respiratory system	34	16.1	17.0
Diarrhea and enteritis, under 2 years	100	47.5	64.2
Diarrhea and enteritis, 2 years and over	40	19.0	16.5
Other diseases of digestive system	112	53.2	55.1
Bright's disease and nephritis	110	52.2	56.4
Childbirth	21	10.0	10.1
Early infancy	76	36.1	49.1
Suicide	47	22.3	23.4
Other violence	215	102.1	85.0
All other causes	155	73.6	74.3

Tuberculosis, as usual, was the leading cause of death in August, though diseases of the circulatory system (heart disease, etc.) were a close second, the proportion of total deaths for the former being 147.7 against 134.4 for the latter.

Typhoid fever is still the most fatal epidemic disease in the State, the proportion of all deaths due to this disease being much greater for August than for July, though the proportions declined for all other epidemic diseases except whooping-cough.

CALIFORNIA PUBLIC HEALTH ASSOCIATION

SEVENTH SESSION

ALUM ROCK SPRINGS, SAN JOSE, OCTOBER 12, 1906

The California Public Health Association will hold its fall meeting at Alum Rock Springs, San José, Friday, October 12, at 10 A. M.

The San José Chamber of Commerce has kindly interested itself in the entertainment of the Association and the following program has been arranged.

Special car, furnished by the Alum Rock Railway Company, will leave the corner of First and Santa Clara streets, San José, at 10 A. M. sharp. Free transportation to and from the park.

All in attendance are invited to join in a barbecue furnished by the San José Chamber of Commerce at noon.

The Park Commission furnishes the freedom of the Park.

PROGRAM

Address of Welcome, by HON. H. D. MATHEWS, Mayor of San José.
Address by J. D. RADFORD, President of First National Bank, giving history of the Park, its purposes and future plans.
"Formation of Mineral Springs," by PROF. HARRY S. JOHNSON, Stanford University
"Use and Abuse of Mineral Springs," by DR. ROBERT CREES, Paso Robles.
"Mineral Springs of California," by PHILIP MILLS JONES, Editor of California State Journal of Medicine.
Discussion of Papers.
Questions and Answers.

MINERAL SPRINGS.

The subject of mineral springs is one of the utmost importance to California. No State or country is more richly endowed with them than is California, and there are probably none of the famous springs of Europe but what can be duplicated here, and in their variety we far excel them. The trouble with our springs is that they are not studied and classified so that a person can exercise intelligence in his selection. As a result, more often than otherwise patients go to the one that is not indicated in their particular case, and fail to receive benefit, or may even be injured by their sojourn. Many of the springs have no attending physician, or, if so, he is generally one who has given no exhaustive study to the subject. These springs should be a source of great income to the people of the State and, better, a great relief to the suffering of mankind; but this can be only when they have been carefully studied and intelligently used. There is little doubt but at present they do as much harm as good, simply from the want of proper supervision.

Every one interested in mineral springs who can intelligently discuss and throw light on the subject is urged to be present at the session of the California Public Health Association, to be held at Alum Rock Springs, San José, October 12, 1906, and help in a systematic development of this great health-giving feature of our State.

HEALTH OFFICERS.

Every health officer in the State, and all others interested in sanitation, are urged to be present in San José on October 12 and attend the session of the California Public Health Association. If there is no other benefit to be derived from these meetings than that of getting acquainted with each other and enjoying a social hour, the cost would be a good investment. Strong, earnest men and women, absorbed and interested in their work, can not associate without both receiving and giving good. The papers and discussions, the questions and answers, make these conferences of great value to every one who attends them.

"SEWAGE DISPOSAL.

''The very existence of a question of sewage disposal depends on the inherent selfishness of man. If every one, both individuals and communities, followed the golden rule and decisively and consistently refused to do anything which could interfere with his neighbors' happiness or health, there would be no sewage disposal question. Human nature, however, is essentially selfish, and as long as it is cheaper and easier for a farmer to build a privy over a stream than to dig a cesspool, or for a city to empty its outfall sewer directly into a river than to first purify the sewage, just so long will these methods continue to be employed regardless of the consequences, unless some higher power intervenes.

''The above-mentioned practice is certainly revolting enough to deserve condemnation, and it is a startling evidence of man's selfishness that such things are done. But a municipal conscience is very small and feeble, and the plea of 'didn't think' has no more effect than 'don't care,' after an epidemic has been started.

''Of all the data which modern science has established, the fact that certain diseases are directly caused by impure drinking water is of the greatest importance and benefit. It is now a matter of common knowledge that vaccination prevents smallpox; that anti-toxin removes the dread of lockjaw and makes diphtheria curable; that consumption, not too far advanced, can be arrested; but that cancer and meningitis are still mysterious diseases. Typhoid fever and diarrheal disturbances are known to be among the list of water-borne diseases (that is, communicated by drinking water), and it is no exaggeration to say that if all drinking water were pure, typhoid fever would be stamped out. The very thought of drinking sewage is nauseating. No one, knowingly, would drink from a brook which drained a barnyard or a privy. The sight of a stream of drinking water winding in and out among piles of manure, no matter how clear and pure the water might appear, would turn any stomach, and only extreme thirst could make such water palatable. And yet typhoid fever is introduced into water in just such a way. Somewhere, somehow, some man, woman, or child has acquired typhoid fever. The bowel discharges of the patient are thrown down a privy, into a barnyard, onto the fields, into the sewer, or even directly in contact with food. The sewage is carried or is washed down to a stream, the water from which runs ultimately into a reservoir. Some city drinks the reservoir water and an epidemic ensues. The department of health, among its other duties, is charged with the task of preventing such an outrage.

"There are two questions which suggest themselves, when such a picture is presented:

"1. Has the farmer the right to build a privy or have his barnyard where he pleases on his own land?

"2. Will not the agency of typhoid be lost, or destroyed, in a stream after traveling a certain distance?

"The first question can be answered definitely in the language of common law, that every man must so use his own property as not to injure or destroy the property of another. Not long ago, John Mitchell, in making an appeal before President Roosevelt, said, with great emphasis, that he represented the claim of two million people. The President instantly replied that he stood for the rights of eighty million people. It is by this principle that the department can prevent one man from doing what will imperil thousands, so, no matter what a man or a community does, if it tends to injure the health of other communities, the department, by its constitution is bound to prevent such an abuse of private rights.

"The second question can not be so definitely answered. Severe epidemics have been caused by privies, built over small streams, ten miles above a water works intake. Cities like Cohoes, which take their drinking water from a river into which other cities have discharged sewage, invariably have a high death-rate from typhoid fever, even though the sewage discharge is many miles up stream. In the recent controversy between Chicago and St. Louis, experts testified that it was quite possible for the typhoid germ to journey in the sewage from Chicago down stream to the St. Louis water works intake, a distance of over two hundred miles. It is necessary for the department of health to adopt a safe policy, and when a city or village takes its water from a stream, it is incumbent on the department to see that all possible danger of infection from sewers, privies, cesspools, or barnyards is eliminated. Fortunately, the dangerous elements in sewage can be entirely removed by a proper system of treatment, and it is evident that such a system ought to be, and must be, installed whenever a city discharges sewage into any stream subsequently used for drinking water. It is a pity that every community does not voluntarily assume this responsibility. In olden days, no crime was so atrocious as that of poisoning wells, and even in times of war the moral sense of those heathen nations was sufficient to prevent such a convenient way of destroying a nation's enemies. But in these days, one city poisons another's water supply without the least hesitation and with little or no protest except from the State department of health. The duty of the department, however, is plain, and it remains for it to point out to each community the proper and most efficient means of removing the poisons from the sewage effluents."

The above article from the July Bulletin of the New York State Board of Health applies with equal force to California conditions. Our mountain streams, which should be pure, are badly polluted by the sewage of the towns along their banks, with a result that typhoid fever is prevalent in the foothills and on the plains. It is no satisfaction to know that other states are perhaps as bad as this; but the evidence that other State Boards of Health feel the same necessity for work and are working along the same lines gives us courage to persevere in our efforts to keep our streams clean.

HEALTH OF SCHOOL CHILDREN.

An article on "Mental Health of School Children," appearing in the July Bulletin, called forth a great deal of criticism pro and con. This criticism is sufficient to prove that the subject is one of vital interest to the State and one which should be kept before the public.

Nothing is of more importance than the proper rearing of our children who are so soon to take our places in the management of affairs. The future prosperity of our State depends upon them. We seldom find a healthy, resourceful mind in a weak and sickly body; therefore, in the management of our affairs, it is only by having the best minds in the soundest bodies that we can hope to reach the high civilization to which we aim.

A perfect system of education should be symmetrical, developing mind and body at the same time. A person full of facts which he can not make use of is not as *well* educated as the man who can not read but who can build a brick wall. We do not want the coming generation to be merely living encyclopedias, full of facts but with no power to apply them, any more than we want a race of uneducated giants. We do want strong, healthy men and women with minds well stored with ideas and with the power and will to use their knowledge.

That the present school system tends to a one-sided development is believed by many, among whom are some of our best educators, and as a reason for their belief they point to the children who each year leave school broken down in physical or mental health. That these form even a large minority no one claims, but taken collectively there are in the State a large number of such children—far too large to be neglected. How to remedy the fault we do not pretend to say. We believe we see the danger, and would call the attention of those in charge of the schools to this danger. Our duty lies in lessening the evil results by protecting the health of the children and putting them in the best possible physical condition.

Every physician of extensive family practice can readily call to mind many cases of breakdown in children due to the cramming process in vogue in our schools and to the intense nervous excitement attending the approaching day of promotion. These children are probably not the robust ones, but no school system should force the weak to follow a course laid out for the strong. And just here is the pith of the article in question: "*The medical inspectors should be a part of our school organizations.*"

There is no doubt that the physically and mentally perfect child can stand the pressure of school work without detriment, but how many answer to this roll-call. Even the average child may show no marked evil effects; but how about the great number that are below the average, some of whom suffer great harm and none secure the benefits due them? It is from this class that we get the discouraged boy or girl, who leaves school in disgust or breaks down in an attempt to do work beyond his mental or physical strength.

A teacher, every minute of whose time is taken up with work for the class, is not, and can not be expected to be, a diagnostician. The child may droop and show symptoms which to a physician would mean the beginning of serious trouble, but which would pass unnoticed by the teacher, or, if noticed, would be put down to no more serious cause than laziness.

While in school, it is very important that steps looking to the health of the child should be taken, if the well-being of our future citizens is to be considered. If defects in a child's organism are allowed to go unheeded by our school authorities, serious trouble is sure to follow; but if such defects are properly looked after, the child's health will be preserved and he will obtain a better education. This can be done by having attached to our schools a regular physician, whose duty it is to thoroughly examine all children. Such examination should be made at least yearly, upon the entrance of the child to school. Not only the eyes, ears, nose, and throat, from which so much trouble arises, but also all other organs should be examined and defects carefully noted. Throughout the term the physician should be in close attendance and teachers should freely consult him. Any want of attention in a child usually attentive, or any unnatural irritability or drooping, should at once be referred to the doctor, and his decision should be final. If the trouble is acute, an epidemic might be prevented and many lives saved. If caused by overwork and a general breaking down, equally good results would follow.

The school examining physician is no new idea. Such an official is already installed in some of our California cities and in many Eastern states, and is giving excellent service. Our children are too precious to be sacrificed or to be measured by a money value, and the expense seems to be the only objection to the plan.

When our State and local governments, as governments and not as individuals, fully appreciate the value of physically perfect men and women, and that such are almost never among the criminal class, no effort will be too great or expense too much to bring our children to that condition.